

1    **Claims**

- 2    1. A valve for a blowtorch, the valve comprising a housing connected  
3        between a reservoir and a nozzle of the blowtorch, a switching device  
4        for switching the valve between a communicating mode and a  
5        blocking mode and an adjusting device for adjusting the flow rate of  
6        the gas through the valve.
- 7    2. The valve according to claim 1 wherein the housing includes an inlet  
8        communicated with the reservoir of the blowtorch and an outlet  
9        communicated with the nozzle of the blowtorch.
- 10   3. The valve according to claim 2 wherein the housing further includes a  
11        first chamber communicated with the inlet, a channel communicated  
12        with the first chamber, a second chamber through which the channel  
13        is communicated with the outlet, and the switching device includes a  
14        plunger installed in the first chamber, and the adjusting device  
15        includes a plunger installed in the second chamber.
- 16   4. The valve according to claim 3 wherein the first chamber includes a  
17        wide portion, a narrow portion and an annular shoulder formed  
18        between the wide portion and the narrow portion, and the plunger of  
19        the switching device leaves the annular shoulder in the  
20        communicating mode but abuts the annular shoulder in the blocking  
21        mode.
- 22   5. The valve according to claim 4 wherein the inlet leads to the large  
23        portion of the first chamber, and the channel leads from the narrow  
24        portion of the first chamber.
- 25   6. The valve according to claim 4 wherein the plunger includes a wide  
26        portion installed in the wide portion of the first chamber for abutment

- 1       against the annular shoulder of the first chamber and a narrow portion  
2       installed substantially in the narrow portion of the first chamber.
- 3       7. The valve according to claim 6 wherein the narrow portion of the  
4       plunger extends through the narrow portion of the first chamber.
- 5       8. The valve according to claim 7 wherein the switching device further  
6       includes a pusher for pushing the narrow portion of the plunger  
7       thereof.
- 8       9. The valve according to claim 8 wherein the pusher is movable relative  
9       to the narrow portion of the plunger.
- 10      10. The valve according to claim 9 wherein the pusher includes an  
11       inclined portion for pushing the narrow portion of the plunger.
- 12      11. The valve according to claim 6 wherein the switching device further  
13       includes an annular seal put around the narrow portion of the plunger  
14       thereof for abutment against the annular shoulder.
- 15      12. The valve according to claim 7 wherein the annular seal includes an  
16       internal edge put in an annular groove defined in the narrow portion  
17       of the plunger of the switching device.
- 18      13. The valve according to claim 6 wherein the switching device further  
19       includes a cap for keeping the plunger thereof in the first chamber.
- 20      14. The valve according to claim 13 wherein the cap includes a wide  
21       portion put against the housing and a narrow portion put in the first  
22       chamber.
- 23      15. The valve according to claim 13 wherein the switching device further  
24       includes an annular seal put between the wide portion of the cap and  
25       the housing.
- 26      16. The valve according to claim 13 wherein the switching device further

1 includes a spring compressed between the cap and the plunger  
2 thereof.

3 17. The valve according to claim 3 wherein the plunger of the adjusting  
4 device includes a conical end for sealing the outlet.

5 18. The valve according to claim 3 wherein the adjusting device further  
6 includes a driver installed in the second chamber for pushing the  
7 plunger thereof.

8 19. The valve according to claim 18 wherein the driver of the adjusting  
9 device includes a thread formed thereon, and the second chamber  
10 includes a thread formed on the wall for engagement with the thread  
11 of the driver of the adjusting device.

12 20. The valve according to claim 18 wherein the plunger of the adjusting  
13 device includes a round end, and the driver of the adjusting device  
14 includes a recessed end for receiving the round end of the plunger.